

# **POWERTRIM**

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**Code 407F**

## **OWNER'S HANDBOOK**

**CODE SERIAL NO.**  
**407F 310000001**  
**Issue 10/2009**

**PART NO: 111-3445 (Rev. A)**

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## LIMITED WARRANTY

**Hayter Limited** warrants to the original user / purchaser that this unit shall be free from defects in material and workmanship under normal use and service for a period of **three years** from the date of purchase. The manufacturers of the engine and battery pack system (where applicable) furnish their own warranty and services are provided through their authorised network (Refer to "Engine/Battery Pack Warranty Statement"). To qualify for the full benefit of the warranty, the warranty registration card must be returned within 60 days of purchase. Subject to the conditions and exclusions noted in this limited warranty, we shall at our option, repair or replace any warranted part during the applicable period. If you are in doubt or experience any difficulty, please consult a **Hayter** Authorised Service Dealer for clarification..

To qualify for the extended warranty (second and third year) of the three year limited warranty, the machine must have annual services carried out by an Authorised Hayter Service Dealer. These chargeable services should be carried out within 12 and 24 months of the date of purchase.

Excluded from the extended warranty period are those items which are subject to normal wear and tear e.g. tyres, wheels, cutterbars, cables, batteries and other consumable wearing parts.

All consumer machines which are fitted with a **genuine** Hayter friction disc as original equipment, before use, are covered by a **Lifetime Warranty** against the engine crankshaft bending. **Note:** friction washers, blade brake units and other such devices are not applicable. Only machines fitted with a **genuine** Hayter friction disc, which are used in accordance with the recommended operating and maintenance procedures, are covered.

This warranty does not apply to any unit that has been tampered with, altered, misused, abused or used for hire, and will become invalid if non genuine Hayter parts are fitted. This warranty does not cover minor mechanical adjustments unless they are due to defective materials or workmanship. Consult the Owner's Handbook or a Hayter Authorised Service Dealer for assistance when making these adjustments.

### **A warranty period of 90 days applies to machines used for commercial purposes.**

To make a warranty claim, return the unit to a **Hayter** authorised dealer along with proof of purchase stating the machine serial number and date of purchase. The service receipt(s) or this Owner's Handbook with the 1st/2nd year service boxes fully completed, must be produced as proof of entitlement to the extended warranty period. Subject to the conditions and exclusions in this limited warranty, the authorised dealer will, at our option, repair or replace any warranted part within the duration of the warranty period.

This limited warranty gives you specific legal rights and is in addition to any statutory rights to which you may be entitled and your statutory rights are not affected by this warranty. If you need additional information concerning this written warranty, or assistance in obtaining services, please write to:

**HAYTER LIMITED,**  
Service Department,  
Spellbrook,  
Bishop's Stortford,  
Hertfordshire. CM23 4BU

1st Year  
Service  
Record



2nd Year  
Service  
Record



Date .....

Date .....

Signed .....

Signed .....

# OPERATOR SAFETY

## OWNER'S INFORMATION

**Know your product:** If you understand the unit and how the unit operates, you will get the best performance. As you read this manual, compare the illustrations to the unit. Learn the location and the function of the controls. It is important that you read and understand these original instructions thoroughly before attempting to start or operate this equipment.



**WARNING: Look for this symbol to indicate important safety precautions. This symbol indicates: "Attention! Become Alert! Your Safety Is At Risk."**

### Responsibility Of The Owner



**WARNING: This cutting machine is capable of throwing objects. Failure to observe the following safety instructions could result in serious injury to the operator or bystanders.**

**The responsibility of the owner is to follow the instructions below.**

## SAFETY PRECAUTIONS

### I. General Operation

1. Read, understand, and follow all instructions on the machine and in the manual(s). Be thoroughly familiar with the controls and the proper use of the machine before starting.
2. Familiarize yourself with all of the safety and operating decals on this equipment and on any of its attachments or accessories.
3. Do not put hands or feet near or under rotating parts.
4. Only allow responsible individuals, who are familiar with the instructions, to operate the machine.
5. Thoroughly inspect the area where the machine is to be used and remove all foreign objects. Your equipment can propel small objects at high speed causing personal injury or property damage. Stay away from breakable objects, such as house windows, automobiles, greenhouses, etc.
6. Keep the area of operation clear of all persons, particularly small children, and pets.

7. Wear appropriate clothing such as a long-sleeved shirt or jacket. Also wear long trousers. Do not wear shorts.
8. Do not wear loose clothing or jewelry. They can be caught in moving parts.
9. Always wear safety goggles or safety glasses with side shields when operating the machine to protect your eyes from foreign objects which can be thrown from the unit.
10. Always wear work gloves and sturdy footwear. Wear footwear that will improve footing on slippery surfaces. Do not operate product when barefoot or wearing open sandals. Leather work shoes or short boots work well for most people. These will protect the operator's ankles and shins from small sticks, splinters, and other debris.
11. It is advisable to wear protective headgear to prevent the possibility of being struck by small flying particles, or being struck by low hanging branches, twigs, or other objects which may be unnoticed by the operator.
12. Do not operate the machine without proper guards or other safety protective devices in place.
13. Use this equipment for its intended purpose only.
14. See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.
15. Operate only in daylight or good artificial light.
16. Do not operate product when fatigued or under the influence of alcohol, drugs or other medication which can cause drowsiness or affect your ability to operate this machine safely.
17. Never operate machine in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run.
18. Before each use, inspect the throttle control lever and cable. Make sure that the cable is free and that the lever is not damaged. Also check the cable linkage running to the carburetor for kinks, loose fittings, and obstructions. Verify that the control bail is working properly.
19. Stop the rotating trimmer head when crossing gravel drives, walks, or roads. Wait for the cutting lines to stop rotating.
20. Watch for traffic when operating near, or when crossing roads.

# OPERATOR SAFETY

21. Stop the engine whenever you leave the equipment, before cleaning, repairing or inspecting the unit, be sure the trimmer head and all moving parts have stopped. Let the engine cool, disconnect the spark plug wire and move it away from the spark plug.
22. If the equipment should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and prevent it from touching the spark plug. Check immediately for the cause. Vibration is generally a warning of trouble.
23. After striking a foreign object, stop the engine. Remove the wire from the spark plug. Inspect the machine for damage. If damaged, repair before starting and operating the machine.
24. Never leave the machine unattended when the engine is running. Remove the wire from the spark plug.
25. Regularly inspect the machine. Make sure parts are not bent, damaged or loose.
26. Allow muffler and engine areas to cool before touching. Never pick up or carry the trimmer while the engine is running.
27. Prolonged exposure to noise and vibration from petrol engine powered equipment should be avoided. Take intermittent breaks and/or wear ear protection from engine noise as well as heavy work gloves to reduce vibration in the hands.

## II. Slope Operation

Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not trim it.

**Do** trim across the face of slopes; never up and down. Do not trim excessively steep slopes (maximum 15 degrees) or areas where the ground is very rough. Exercise extreme caution when changing direction on slopes.

**Do** remove objects such as rocks, tree limbs, etc.

**Do** watch for holes, ruts, or bumps. Tall grass can hide obstacles.

**Do not** trim near drop-offs, ditches, or embankments. The operator could lose footing or balance.

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**Do not** trim on wet grass. Reduced footing could cause slipping.

## III. Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the trimming activity. *Never* assume that children will remain where you last saw them.

1. Keep children out of the trimming area and under the watchful care of a responsible adult.
2. Be alert and turn machine off if children enter the area.
3. Before and while moving backwards, look behind and down for small children.
4. Never allow children to operate the machine.
5. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

## IV. Service

1. Use extra care in handling petrol and other fuels. They are flammable and vapors are explosive.
  - a. Use only an approved container.
  - b. Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - c. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors or near appliances with pilot lights, heaters, or other ignition sources. Replace fuel tank cap securely. If fuel is spilled, do not start the engine but move product and fuel container from area. Clean up spilled fuel and allow to evaporate.
  - d. Never store the machine or fuel container inside where there is an open flame (such as a water heater), or other ignition source.
  - e. If the fuel tank has to be drained, this should be done outdoors. The drained fuel should be stored in a container specifically designed for fuel storage or it should be disposed of carefully.

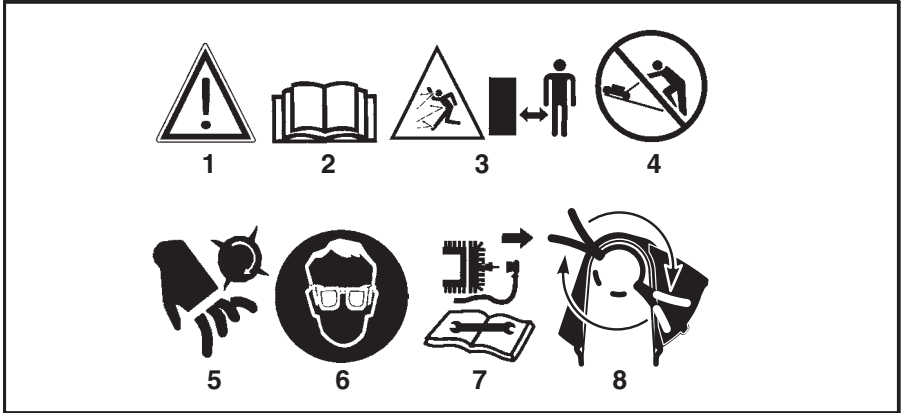
## OPERATOR SAFETY

- Never run the engine indoors or inside a closed area. The exhaust fumes are dangerous, containing CARBON MON-OXIDE, an ODORLESS and DEADLY gas.
- Never make adjustments or repairs with the engine running. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting. Always wear eye protection when you make adjustments or repairs.
- Check the trimmer head and engine mounting bolts at frequent intervals for proper tightness.
- Keep all nuts and bolts tight and keep equipment in good condition. Check mounting hardware on trimmer head every time you change trimmer line and prior to each use.
- Never tamper with safety devices. Check their proper operation regularly.
- When servicing or repairing the machine, do not tip the machine over or up unless specifically instructed to do so in this Manual. Service and repair procedures can be done with the machine in an upright position. Some procedures will be easier if the machine is lifted on a raised platform or working surface.
- To reduce fire hazard, keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Always disconnect spark plug wire before cleaning, repairing, or adjusting.
- Do not change the engine governor setting or over-speed the engine.
- Clean and replace safety and instruction decals as necessary.
- To guard against engine over-heating, always have engine debris filter mounted and clean.
- Inspect trimmer before storage. When not in use, disconnect spark plug lead and store product indoors in a dry place locked or otherwise inaccessible to children.
- Use only original equipment or authorized replacement parts.
- Never replace the cutting lines with metal parts.

# OPERATOR SAFETY

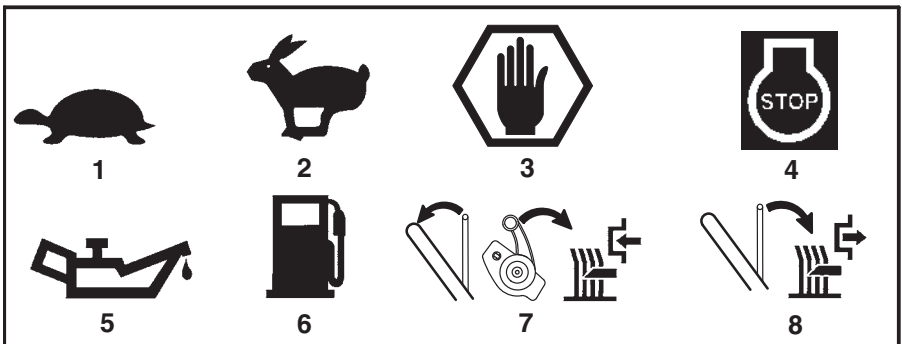
## INTERNATIONAL PICTORIALS

**IMPORTANT:** The following pictorials are located on your unit or on literature supplied with the product. Before you operate the unit, learn and understand the purpose for each pictorial.



### Safety Warning Pictorials

- |  |  |
|--|--|
| <p>1 WARNING</p> <p>2 IMPORTANT: Read Owner's Manual Before Operating This Machine.</p> <p>3 WARNING: Thrown Objects. Keep Bystanders Away. Read User Instructions Before Operating This Machine.</p> <p>4 Do Not Trim Up And Down Slopes. Trim Across Slopes.</p> | <p>5 WARNING: Rotating Parts. Stop Engine. Disconnect Spark Plug Wire Before Making Adjustments.</p> <p>6 WARNING: Wear Eye Protection</p> <p>7 DANGER: Disconnect Spark Plug Wire Before Servicing Unit.</p> <p>8 Direction of Rotating Line.</p> |
|--|--|



### Control And Operating Pictorials

- |   |   |
|---|---|
| <p>1 Slow</p> <p>2 Fast</p> <p>3 Engine Stop</p> <p>4 Engine Stop</p> | <p>5 Oil</p> <p>6 Fuel</p> <p>7 Engage</p> <p>8 Disengage</p> |
|---|---|

# ASSEMBLY

## CONTENTS OF LITERATURE PACK

- 1 - Operator's Manual
- 1 - Engine Manual
- 1 - Document of Conformity
- 1 - Warranty Card
- 1 - Safety Glasses
- 1 - Trimmer Line (2 Sets)
- 1 - Bag (4 Screws)



**WARNING:** Always wear safety glasses or eye shields while assembling the machine.

## TOOLS REQUIRED

- 1 - Knife to cut carton.
- 1 - Phillips Screwdriver.

Figure 1 shows the machine completely assembled and positioned in the carton for shipment.

References to the right or left hand side of the machine are from the viewpoint of the operator's position behind the unit.

## REMOVE THE TRIMMER FROM CARTON

1. Remove the parts bag and any loose parts from carton.
2. Remove the packing material positioned around the unit.
3. Cut down all four corners of the carton and lay the side panels flat.
4. Pull the trimmer out of the carton and off the base pad.
5. Remove packing material from around the trimmer head.
6. Remove protective plastic from front of frame.

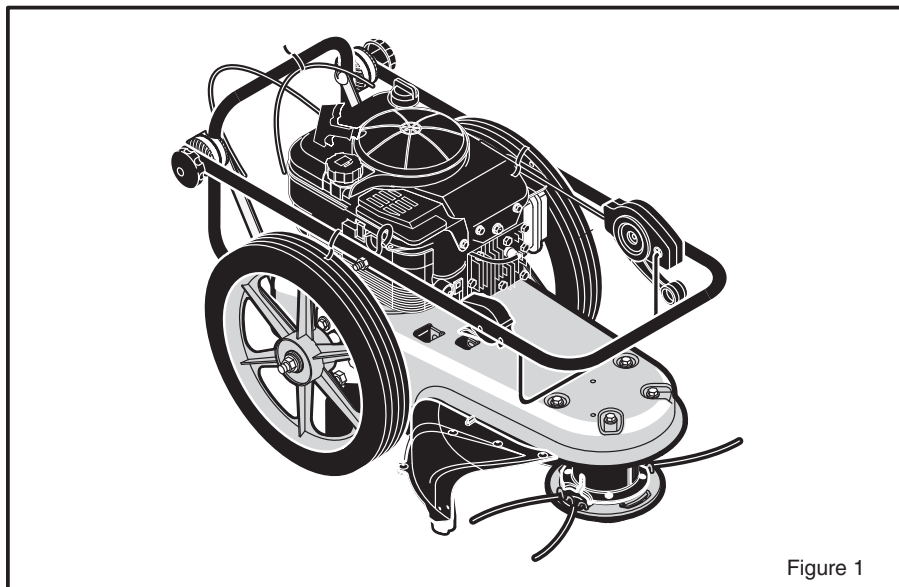


Figure 1



# ASSEMBLY

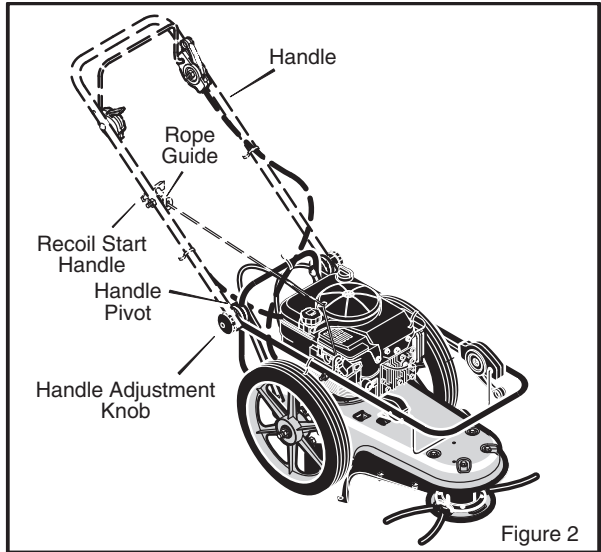
## RAISE THE HANDLE

1. Hold the **handle** with one hand and loosen both **handle adjustment knobs** until the ratchet teeth are disengaged. Do not remove the **handle adjustment knobs**. See Figure 2.
2. Raise the **handle** to the operating position.
3. Stand in the operator's position behind the machine. Put the **handle** in a comfortable position. Make sure both sides of the **handle** are level.

**NOTE: Make sure the cables are not caught between the upper and lower handle.**

4. Tighten the **handle adjustment knobs**. Make sure the **handle pivots** are locked in place.

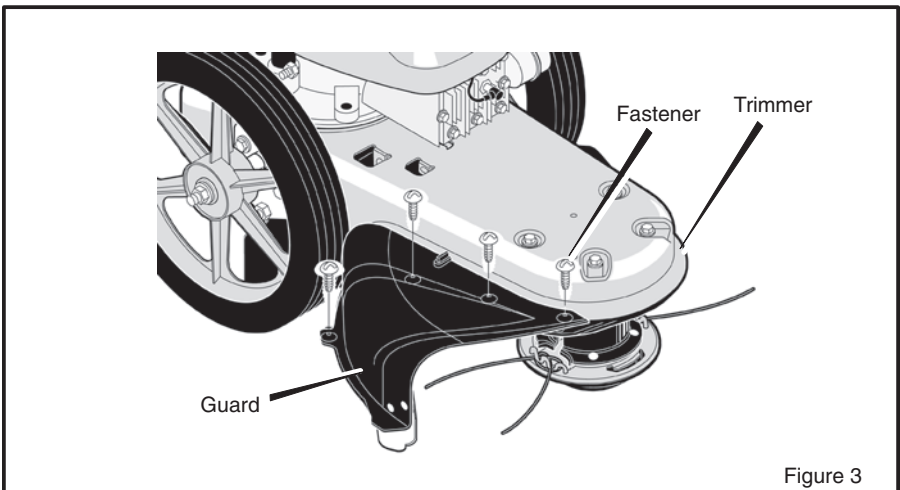
**NOTE: The handlebar height is adjustable. See "How To Adjust The Height Of The Handlebar" in the Maintenance section.**



5. To attach the **recoil start handle** to the **rope guide**, twist the rope through the **rope guide** mounted on the right side of the handlebar.

## ATTACH THE GUARD

1. Attach the **guard** to the **machine** with the four **fasteners** as shown. See Figure 3.



# ASSEMBLY

## ENGINE PREPARATION

**Note: Engine does not contain OIL or PETROL.**



**WARNING: Follow the engine manufacturer's instructions for the type of petrol and oil to use.**

**Always use a safety petrol container. Do not smoke when adding petrol to the engine. When inside an enclosure, do not fill with petrol. Before you add petrol, stop the engine. Let the engine cool for several minutes.**

See the engine manufacturer's instructions for the type of petrol and oil to use. Before you use the unit, read the information on safety, operation, maintenance, and storage.

**Note: Actual sustained horsepower will likely be lower due to operating limitations and environmental factors.**

## Fill Crankcase With Oil

1. Remove the oil fill cap/dipstick shown in Figure 4. Fill the crankcase to the **FULL** line on oil fill cap/dipstick. **DO NOT OVER-FILL.**
2. Install the oil fill cap/dipstick and tighten securely.

## Fill Fuel Tank With Petrol

See the engine manufacturer's instructions for the type of petrol to use.

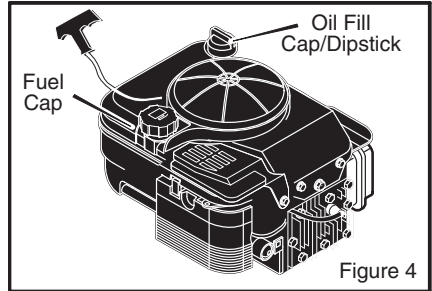


Figure 4

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## ✓ CHECKLIST

For the best performance and satisfaction from this quality product, please review the following checklist before you operate the machine:

- ✓ All assembly instructions have been completed.
- ✓ Check carton. Make sure no loose parts remain in the carton.

As you learn how to use the machine, pay extra attention to the following important items:

- ✓✓ Engine oil is at correct level.
- ✓✓ Fuel tank is filled with fresh, clean, regular unleaded petrol.
- ✓✓ Become familiar and understand the function of all controls. Before you start the engine, operate all controls.

# OPERATION

## KNOW YOUR POWERTRIM

READ THE OWNER'S HANDBOOK AND ALL SAFETY RULES BEFORE YOU OPERATE the machine. To familiarise yourself with the location of the controls, compare the illustrations with your machine. **Save this handbook for future reference.**

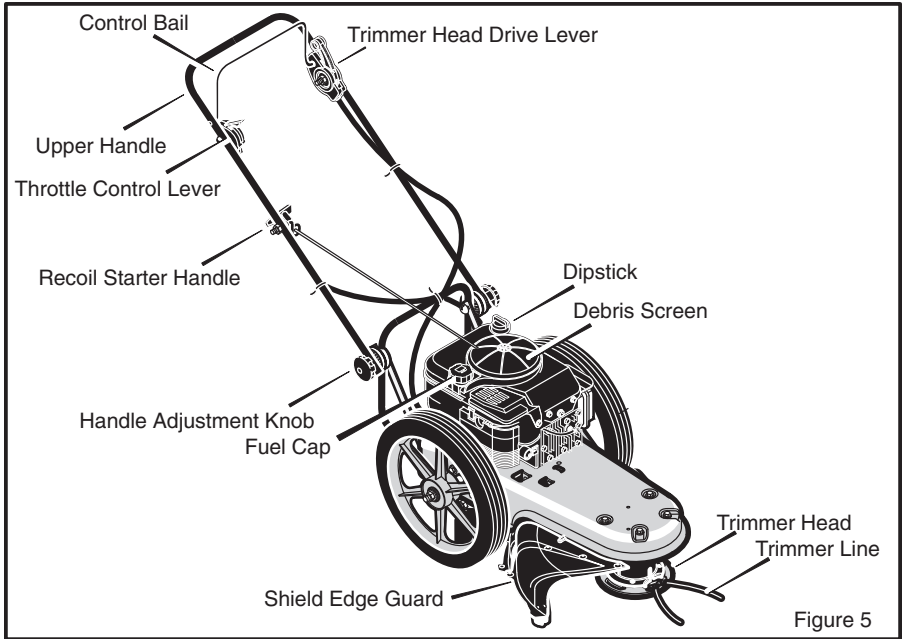


Figure 5

**Trimmer Head Drive Lever** – Engages the rotation of the trimmer head.

**Throttle Control Lever** – Controls the speed or stops the engine.

**Control Bail** – Release to stop the rotation of the trimmer head.

**Recoil Starter Handle** – The engine is equipped with an easy pull recoil starter.

## EYE PROTECTION



**WARNING: Debris thrown from the machine can result in foreign objects being thrown into the eyes, which can cause severe eye damage. Always wear safety glasses or eye shields when operating the machine.**

Always wear safety glasses. If you wear eye glasses, put a Wide Vision Safety Mask over your eye glasses.

## STOP THE TRIMMER HEAD

1. Release the **control bail**. It will return to its open position and disengage the trimmer head.

## STOP THE ENGINE



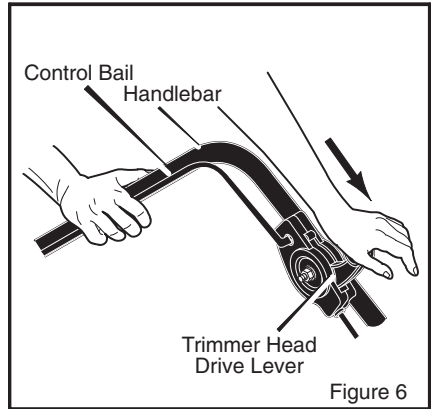
**WARNING: The trimmer head will continue to rotate for several seconds after the engine has stopped**

1. Move the **throttle control lever** completely back to the STOP position.

# OPERATION

## USE THE TRIMMER HEAD DRIVE LEVER

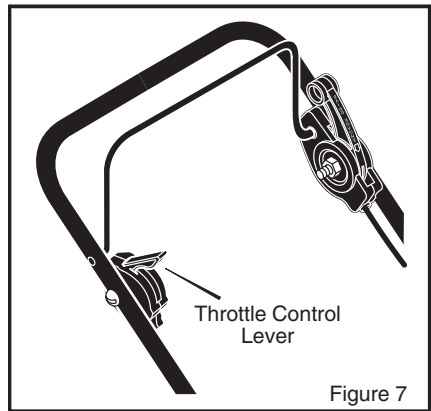
1. To engage the trimmer head, hold the **control bail** against the **handle**. Move the **trimmer head drive lever** forward to engage the trimmer head. See Figure 6. The faster the engine runs, the faster the trimmer head will rotate.
2. Once the trimmer head is rotating, push the machine forward to trim.



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## USE THE THROTTLE CONTROL

1. During normal use, set the **throttle control lever** in the FAST position to run the engine at full speed.
2. Pull the **throttle control lever** back to decrease engine speed. Push the **throttle control lever** forward to increase engine speed.
3. To stop the engine, pull the **throttle control lever** completely back to the STOP position.

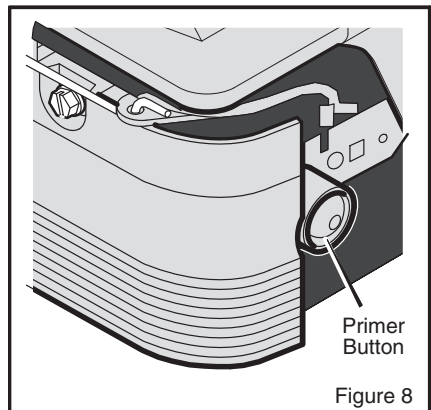


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## USE THE PRIMER BUTTON

1. Push the **primer button**. See Figure 8 for location. For the number of times to push the **primer button**, see the primer button decal located on the engine or follow the directions in the Engine Manual. Wait approximately two seconds between each push.

**NOTE:** Do not use the primer button to restart a warm engine after a short shutdown.



# OPERATION

## START THE ENGINE

**NOTE:** DO NOT BE ALARMED, your engine will smoke the first time it is started. It is burning off the protective coating that is on the internal engine parts.



**WARNING:** Never leave the machine unattended while the engine is running. Wait for the trimmer lines to stop rotation.

1. Before each use, remove debris from the **debris screen** shown in Figure 5. Debris can cause the engine to overheat. Wipe the **debris screen** with a cloth or paper towel.
2. Move the throttle control lever forward to the START or FAST position.
3. To start a cold engine, push the primer button five times. Wait two seconds between each push of the primer button.

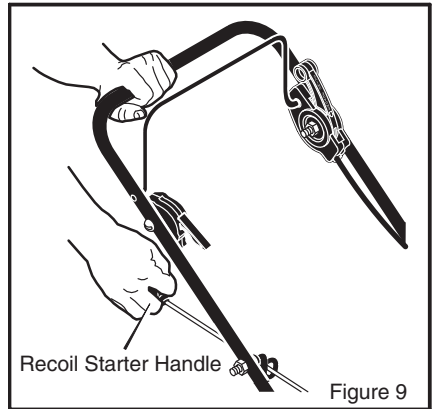
**NOTE:** Do not use the primer to start a warm engine.

4. Firmly hold the **recoil starter handle** with your right hand. See Figure 9.
5. Pull back sharply on the **recoil starter handle**. **DO NOT** allow the starter rope to snap back. Let the starter rope slowly rewind as you hold the recoil starter handle.

**NOTE:** If engine fails to start after three pulls, push the primer button two times and again pull the recoil starter handle.



**WARNING:** Never run the engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from the machine and any moving parts on the engine. Avoid the muffler and surrounding areas. Temperatures may exceed 150°F.



## TRIMMER TIPS



**WARNING:** Debris such as sticks, gravel or stones, can be thrown with sufficient force to cause personal injury or property damage.

- Set the throttle control in the FAST position. If the weeds or grass are tall and thick, operate the machine at a slower walking speed.
- Frequently clean the underside of the machine to remove any grass build up.
- For best results and longer lasting line, use the ends of the line to do the cutting. This is easily done by moving slowly through very thick or heavy weeds.
- If the trimmer lines become too short, it will take longer to complete the job. If the trimmer lines are worn to less than half their original length, change to a new trimmer line. "See How To Change The Trimmer Line" in the Maintenance section.
- Do not trim on excessively steep slopes. If a slope is difficult to stand on, do not trim. Do not trim on slopes when the ground is slippery or wet. Trim across the face of a slope, not up and down.
- Trimming may be done at slower engine speeds especially when trimming around flowers, shrubs, and small trees. Operating at slower speeds will also reduce engine noise and vibration at the upper handle.

# MAINTENANCE

SERVICE RECORDS  Fill in dates as you complete regular service.	Before Each Use	Every 5 Hours	Every 25 Hours	Every 100 Hours	As Noted	SERVICE DATES
Check Engine Oil Level	√					
Check Trimmer Lines	√				<b>1</b>	
Check Trimmer Head Engagement	√					
Engine/Machine Cleaning	√				<b>2</b>	
Check Nuts and Bolts	√					
Check Spark Plug			√			
Change Engine Oil			√			
Service Air Filter			√		<b>3</b>	
Lubricate Jackshaft Assembly			√			
Lubricate Wheel Bearings			√			

**Note 1** – When old line is half the original length, replace with new line.

**Note 2** – Clean daily if used in extremely dusty or dirty conditions.

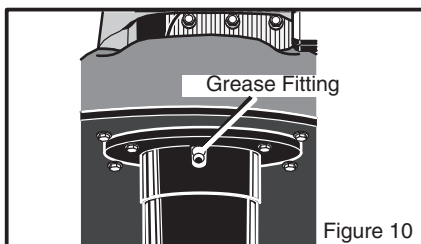
**Note 3** – Change more often if used in extremely dusty or dirty conditions.

# MAINTENANCE

## LUBRICATION

### Lubricate the Jackshaft Assembly

A **grease fitting** is provided to lubricate the jackshaft assembly. Use a grease gun with automotive type grease to lubricate the jackshaft assembly as shown in Figure 10.



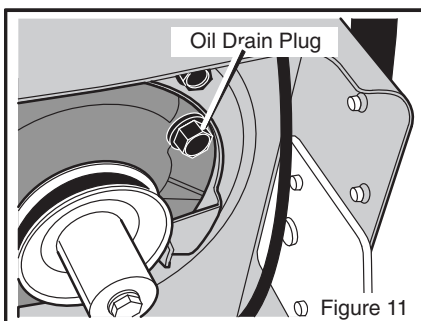
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### Change Engine Oil

Change the engine oil when the engine is warm. For the proper oil capacity, see the engine manufacturer's instructions.

1. Disconnect spark plug wire from the spark plug.
2. Remove the **oil drain plug** as shown in Figure 11.
3. Drain all the engine oil into a flat pan.
4. Install the **oil drain plug**. Make sure the **oil drain plug** is tight.
5. Remove the dipstick.
6. Fill the engine crankcase. **DO NOT OVERFILL**. For proper oil capacity, see the engine manufacturer's instructions.

7. Connect the spark plug wire to the spark plug.



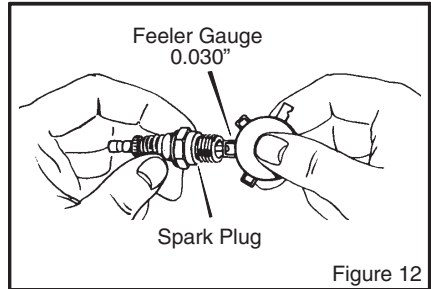
# MAINTENANCE

## SPARK PLUG

Check the **spark plug** every 25 hours. Replace the **spark plug** if the electrodes are pitted or burned or if the porcelain is cracked.

1. Make sure the **spark plug** is clean. Clean the **spark plug** by carefully scraping the electrodes (do not sand blast or use a wire brush).
2. Check the **spark plug** gap with a **feeler gauge**. See "Product Specifications" for the correct **spark plug** gap and replacement **spark plug**.
3. Before installing the **spark plug**, coat the threads lightly with oil for easy removal.

Tighten the spark plug to a torque of 15 foot-pounds.

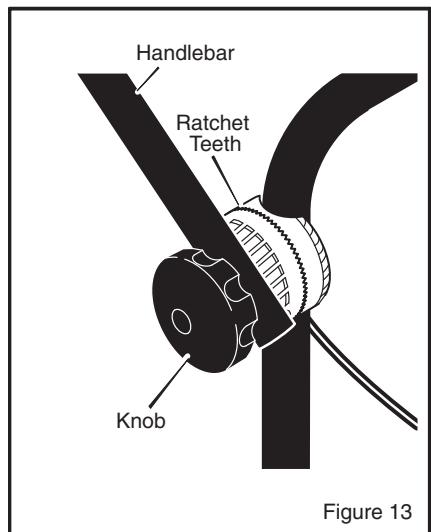


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## ADJUST THE HEIGHT OF THE HANDLEBAR

Use the **knobs**, on each side of the **handlebar**, to adjust the height of the handlebar.

1. Hold the **handlebar** with one hand and loosen both **knobs** until the **ratchet teeth** are disengaged. Do not remove the **knobs**. See Figure 13.
2. Move the **handlebar** up or down to the desired position, then align the **ratchet teeth**. Make sure both sides of the **handlebar** are level.
3. Tighten the **knobs**.





# MAINTENANCE

## SERVICE AND ADJUSTMENT



**WARNING:** Before you inspect, clean or service the machine, stop the engine. Make sure that all moving parts have stopped. Disconnect the wire from the spark plug.

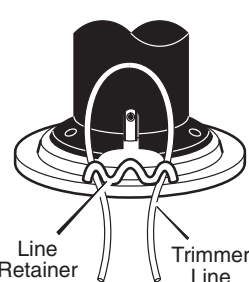
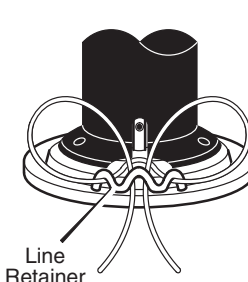
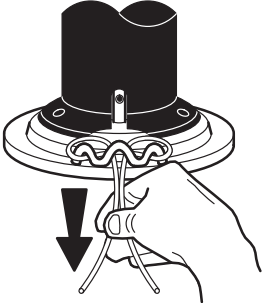
## PROPER CARE OF TRIMMER LINE

For the best performance, use a heavy gauge 3.9mm (0.155" diameter) **trimmer line**. Cut the length of the **trimmer line** to 52cm (21.5 inches). Do not allow the length of the lines to vary more than one inch. This is important to make sure the trimmer head is balanced and does not vibrate.

**IMPORTANT:** To extend the life of the trimmer line, keep the trimmer line moist. If not kept moist, the nylon trimmer line will become dry and brittle. Keep extra trimmer line in a can of water. The line will then stay flexible and easy to change. A flexible line will also last much longer.

## CHANGE TRIMMER LINES

When the trimmer line becomes worn to half the original length, replace the trimmer line as follows:

 <p>Line Retainer      Trimmer Line</p>	 <p>Line Retainer</p>	
<ol style="list-style-type: none"><li>1. Stop the engine. Wait for all moving parts to stop.</li><li>2. Remove worn <b>trimmer line</b> from <b>line retainer</b>.</li><li>3. <b>First</b>, thread the ends of the new <b>trimmer line</b> through the outside loops.</li></ol>	<ol style="list-style-type: none"><li>4. <b>Next</b>, take the ends of the line, cross over the <b>line retainer</b>, and thread the ends through the centre hole.</li></ol>	<ol style="list-style-type: none"><li>5. <b>Then</b>, check to make sure that the ends of the line are even.</li></ol>

# MAINTENANCE

## REPLACE THE DRIVE BELT

To replace the drive belt, see an authorized service center.

## STORAGE



**WARNING: Do not remove petrol while inside a building, near a fire, or while you smoke. Petrol fumes can cause an explosion or a fire.**

When the machine is put in storage for thirty days or more, follow the steps below to make sure the machine is in good condition the following season.

### Trimmer

- Completely clean the machine.
- Put the machine in a building that has good ventilation.

### Engine

To prevent engine damage when the machine is in storage for 30 days or more, follow the steps below:

- Let the engine run until it is out of petrol.
- Drain the oil from the warm engine. Fill the engine crankcase with new oil.
- Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil starter handle so that the oil will protect the cylinder. Install a new spark plug in the cylinder.
- Clean dirt and debris from the cylinder cooling fins and the engine housing.

# TROUBLESHOOTING CHART

TROUBLE	CAUSE	CORRECTION
<b>Engine does not start.</b>	Spark plug wire disconnected.	Connect spark plug wire.
	Engine not primed.	Prime engine.
	Defective or incorrectly gapped spark plug.	Inspect or replace spark plug.
	Fuel tank empty.	Add fuel.
	Dirty carburetor or fuel line.	Clean carburetor or fuel line.
	Dirty air filter.	Replace air filter.
	Carburetor out of adjustment.	See authorized dealer.
	Engine flooded.	Wait several minutes before starting.
	Throttle control lever in incorrect position.	Move throttle lever to FAST or START position.
	Stale fuel.	Drain old fuel and add fresh fuel.
<b>Engine runs poorly.</b>	Bad spark plug.	Replace spark plug.
	Dirty air filter.	Replace air filter.
	Carburetor out of adjustment.	See authorized dealer.
	Stale fuel.	Drain old fuel. Add fresh fuel.

## TROUBLESHOOTING CHART

<b>Engine overheats.</b>	Engine cooling system clogged.	See authorized dealer.
	Carburetor out of adjustment.	See authorized dealer.
	Oil level is low.	Add oil.
<b>Engine will not stop running.</b>	Defective throttle control lever or wire.	See authorized dealer.
<b>Poor trimming performance.</b>	Trimmer line length is too short.	Correct line length is 52 cm (21,5 inches). When less than 1/2 this length, replace the line.
<b>Trimmer vibrates.</b>	Engine not set at FAST speed.	Move engine throttle lever to FAST position.
	Trimmer line lengths are substantially different.	Adjust trimmer line to approximately equal lengths.
	Loose nuts or bolts.	See authorized dealer.
	Broken trimmer head.	See authorized dealer.
<b>Trimmer head does not retain line.</b>	Trimmer line not properly attached.	Follow instructions on decal or see Maintenance section in this manual.
	Broken line retainer.	See authorized dealer.
	Trimmer line not correct size.	Use 3,9 mm (0.155 inch) diameter trimmer line.

# SPECIFICATIONS

<b>Trimmer Line Diameter</b>	3,9 mm (0,155")
<b>Trimmer Line Length</b>	520 mm (21,5")
<b>Height of Cut (Fixed)</b>	76 mm (3")
<b>Dimensions</b>	1400 x 555 x 1000
<b>Engine</b>	Briggs 122T02-0188-B1
<b>KW</b>	2,56
<b>Displacement</b>	190 cc (11,57 cu in.)
<b>Petrol Capacity</b>	0,95 L (1,0 quarts)
<b>Oil Capacity</b>	0,54 - 0,59 L (18-20 oz)
<b>Spark Plug</b>	Champion RJ-19LM
<b>Spark Plug Gap</b>	0,76 mm (0.030 in.)
<b>Weight</b>	34 kg (75 lbs)

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## Engine Power Rating Information

The gross power rating for individual gas engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J1940 (Small Engine Power & Torque Rating Procedure), and rating performance has been obtained and corrected in accordance with SAE J1995 (Revision 2002-05). Torque values are derived at 3060 RPM; horsepower values are derived at 3600 RPM. Actual gross engine power will be lower and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given both the wide array of products on which engines are placed and the variety of environmental issues applicable to operating the equipment, the gas engine will not develop the rated gross power when used in a given piece of power equipment (actual "on-site" or net power). This difference is due to a variety of factors including, but not limited to, accessories (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this Series engine.

## Order Replacement Parts

Replacement parts, except for the engine, transmission, transaxle or differential, are available from your local **Hayter** authorised dealer, the store where the mower was purchased or a service shop recommended by the store.

If you are unable to obtain parts or service in the manner outlined above, then contact:

**HAYTER LIMITED,**  
Service Department,  
Spellbrook,  
Bishop's Stortford,  
Hertfordshire. CM23 4BU

# **Repair Parts**





**Handle And Wheels**

POWERTRIM Code 407F

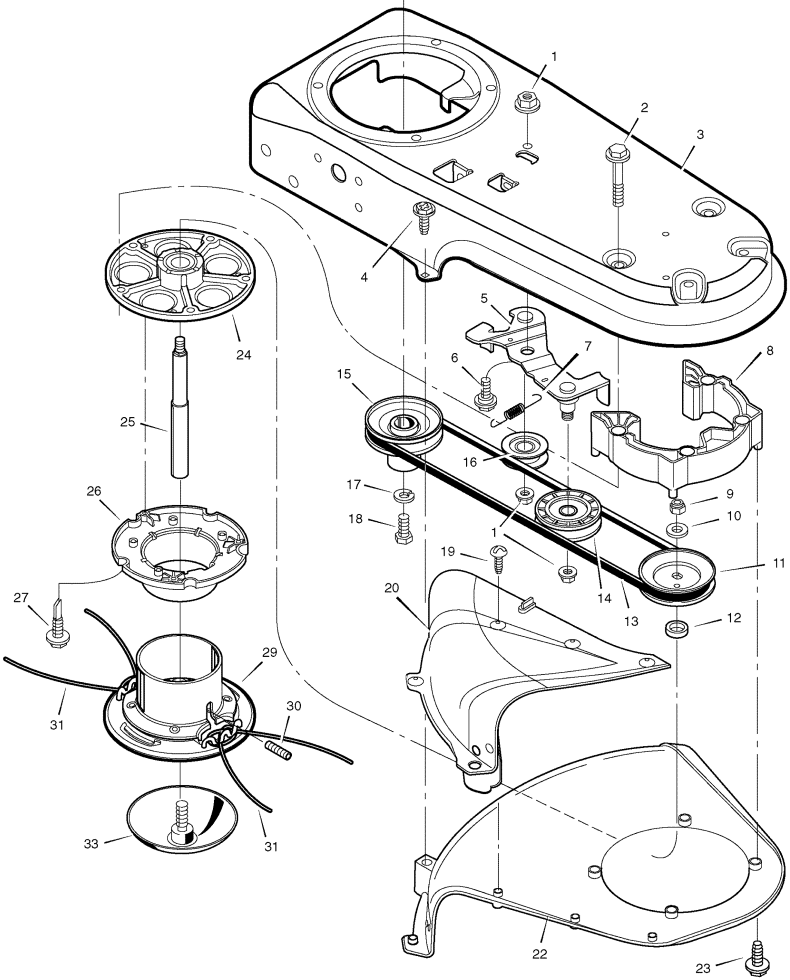
REF NO	PART NO.	QTY.	DESCRIPTION
1	MU740198E701MA		LEVER, Stop
2	MU323035MA		BOLT
3	MU740193MA		CABLE, Control Latching
4	MU071372MA		TIE, Cable
5	MU740196E701MA		HANDLEBAR
6	MU15X116MA		NUT
7	MU1601039MA		CONTROL, Throttle
8	MU672510MA		GUIDE, Rope
9	MU740202MA		KNOB, Handlebar
10	MU783000MA		WASHER
11	MU711936MA		WASHER, Spring
12	MU711937MA		BOLT
14	MU740158MA		PIVOT, Handlebar
15	MU740195E701MA		HANDLEBAR, Lower
16	MU740185MA		WHEEL & TIRE
17	MU015X84MA		NUT, Axle
18	MU0020X3MA		WASHER
19	MU740190MA		SPACER
20	MU740188MA		ASSEMBLY, Axle & Bracket
21	MU26X274MA		SCREW
22	MU711935MA		BOLT, Carriage
23	MU740150E701MA		DECK
24	MU0025X6MA		BOLT
25	MU740192MA		SHIELD, Trailing
26	MU001X45MA		BOLT
27	MU26X267MA		SCREW
28	122T02-0188-B1		ENGINE (Engine Model: 122T02-0188-B1)
29	MU711890MA		PROTECTION, Eye
30	MU015X88MA		NUT
31	MU1601040MA		SUPPORT, Handle
32	MU26X268MA		SCREW
33	MU690798		CLAMP, Throttle
34	MU712409MA		DECAL, Engine Stop
--	MU407002YP		DECAL, Powertrim (Not shown)
--	MU410087YP		DECAL, Hayter (Not Illustrated)
--	MU713006MA		DECAL, Warning (Not shown)
--	MU712409MA		DECAL, Control Instructions (Not shown)
--	MU1739579		INSTRUCTION BOOK & PARTS LIST

**Footnotes**

**Cutting Head And Shield**

**POWERTRIM Code 407F**

NOTE: Unless noted otherwise,  
use the standard hardware torque  
specification chart.



**Cutting Head And Shield**

POWERTRIM Code 407F

REF NO	PART NO.	QTY.	DESCRIPTION
1	MU015X84MA		NUT
2	MU025X11MA		SCREW
3	MU740150E701MA		FRAME, Trimmer
4	MU26X256MA		SCREW
5	MU740232MA		BRACKET, Idler Assembly
6	MU009X48MA		BOLT
7	MU712403MA		SPRING
8	MU740292MA		SPACER
9	MU15X119MA		NUT
10	M710083MA		WASHER
11	MU740171MA		PULLEY, Cutting Head
12	MU740173MA		SPACER
13	MU711933MA		BELT
14	MU740244MA		PULLEY, Idler
15	MU740179MA		PULLEY, Engine
16	MU740183MA		PULLEY, Idler
17	MU018X31MA		LOCKWASHER
18	MU001X20MA		BOLT
19	MU26X235MA		SCREW
20	MU770070MA		GUARD ASSEMBLY
22	MU740206MA		GUARD
23	MU26X294MA		SCREW
24	MU1001049MA		JACKSHAFT HOUSING ASSEMBLY
25	MU740300MA		SHAFT, Cutting
26	MU740163MA		WRAP, Upper Head
27	MU712126MA		SCREW
29	MU770037MA		CUTTING DISC ASSEMBLY
30	MU712127MA		SCREW, Set
31	MU740165MA		LINE, Cutting
33	MU740299MA		GUIDE ASSEMBLY, Metal Height

**Footnotes**

# Hardware Identification & Torque Specifications

## Common Hardware Types

Hex Head Capscrew



Carriage Bolt



Washer



Lockwasher



Hex Nut

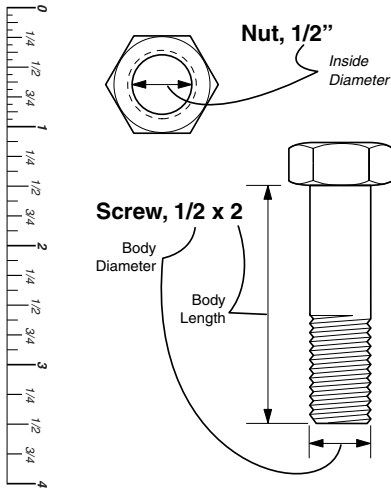


## Standard Hardware Sizing

When a washer or nut is identified as 1/2", this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch; if a second number is present it represents the *threads per inch*

When bolt or capscrew is identified as 1/2 - 16 x 2", this means the *Nominal size*, or *body diameter* is 1/2 inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

**The guides and ruler furnished below are designed to help you select the appropriate hardware and tools.**



Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks		No Marks		No Marks	
	SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	27	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

### NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
  - for prevailing torque locknuts - use 65% of grade 5 torques.
  - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

## Wrench & Fastener Size Guide



1/4" Bolt or Nut  
Wrench—7/16"



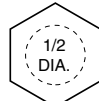
5/16" Bolt or Nut  
Wrench—1/2"



3/8" Bolt or Nut  
Wrench—9/16"



7/16" Bolt or Nut  
Wrench (Bolt)—5/8"  
Wrench (Nut)—11/16"



1/2" Bolt or Nut  
Wrench—3/4"



